Message

Citta Jr., Joseph L. [/O=NPPD/OU=CGO/CN=RECIPIENTS/CN=JLCITTA] From:

4/21/2011 7:24:55 PM Sent:

To: Schneider,, Shelley- NDEQ [shelley.schneider@nebraska.gov]; Reid,, Brad- NDEQ [brad.reid@nebraska.gov]

Dodson, Joshua [joshua.dodson@nebraska.gov]; Prasai, Gyanendra [gyanendra.prasai@nebraska.gov]; Ringenberg,, CC:

Jay- NDEQ [jay.ringenberg@nebraska.gov]; Linder, Mike [mike.linder@nebraska.gov]

RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11 Subject:

Shelley: This note is in reference to our telephone conversation this morning April 21st regarding yours and Brads e-mails of April 18th and 19th contained below. I would like to say again that we did perform the DSI analysis in the manner we thought the NDEQ requested when NPPD was requested to do the side-by-side analysis against the scrubbers in Brad's January 28, 2011 e-mail. That said, in order to address the baseline comments contained in your e-mails, we are certainly willing to provide another theoretical analysis of the operating costs for DSI using the 0.749 lbs SO2/MMBtu baseline number and reducing down to the BART presumptive limit of 0.15 lbs SO2/MMBtu. Per our conversation we will proceed with the requested analysis and provide you the results. Please let me know if you have any additional comments or requests.

Thank You Shelley. Joe Citta

Joe L. Citta Jr. NPPD Corporate Environmental Manager (402) 563-5355 / (402) 563-5168 fax cell--(402) 910-8974



Please consider the environment before printing this email.

From: Schneider,, Shelley- NDEQ **Sent:** Tuesday, April 19, 2011 9:27 AM To: Reid,, Brad-NDEQ; Citta Jr., Joseph L.

Cc: Dodson, Joshua; Prasai, Gyanendra; Ringenberg,, Jay-NDEQ; Linder, Mike

Subject: RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-mail of 4-8-11

Joe -

I want to re-affirm what Brad has said in this email.

The except below is taken from page 15 of the March 2008 revised BART analysis submittal NPPD provided to NDEQ, which has been included in the basis of the proposed SIP, as well as the proposed SIPs of other states. As you see, the basis from which we have been operating is that the baseline is 0.749 lb SO2/MMBTU. This 0.749 lbSO2/MMBTU baseline was determined per the BART rules. Based on the review and the information you provided, using a baseline of 1.72 lb SO2/MMBTU appears to have increased the cost of using the DSI technology. Please let Brad know as soon as possible when you and your folks can visit this week, so we can get this wrapped up. Thanks.

2.2.2 SO₂ Control Technology Effectiveness

Effectiveness is measured by the amount of SO₂ removed by each control technology based on a comparison of the controlled emission rates to the uncontrolled baseline emission rate of the GGS1&2 units. Table 3 provides a summary of the SO₂ control technology effectiveness.

Table 3 SO₂ Control Technology Effectiveness

Identified Control Technology	Emission Rate (lb/MMBtu)	Potential Emissions (tons/yr) ^A	Tons SO₂ Removed (tons/yr)
GGS1&2 Baseline	0.749	49,785	NA
Wet FGD	0.15	9,970	39,815
Dry FGD	0.15	9,970	39,815

A Based on maximum actual 24-hour emissions, maximum heat input of 15,175.5 MMBtu/hr and 100% capacity factor. Note that the potential tons/year value for the Baseline greatly overstates emissions levels (and hence impacts on downwind Class I areas) since it is calculated by using the maximum 24-hour emissions realized over the 3-year baseline period (2001-2003), at a 100% capacity factor. Thus, the tons/yr removed values and improvements in downwind Class I areas are also greatly overstated under this BART analysis.

Shelley Schneider Nebraska DEQ 402-471-4299

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----Original Message----

From: Reid, Brad

Sent: Monday, April 18, 2011 3:55 PM

To: Citta Jr., Joseph L.

Cc: Schneider, Shelley; Dodson, Joshua; Prasai, Gyanendra

Subject: RE: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's

E-mail of 4-8-11

Thanks for the information, Joe. As we talked on the phone, I'm sending you a few discussion topics/questions that we talk about on a conference call later. Primarily we want to discuss the baselines used in the BART cost analysis and modeling analysis. What I understood from our brief conversation was that 1.7 lb-SO2/MMBtu was used as a baseline for the BART analyses, yet 0.749 was used as the modeling baseline. What doesn't seem to make sense is that in

Exhibit 3 of the S&L report appears to show that the baseline of 0.749 was used for the scrubber baselines. For example, an emissions reduction of 39,000 tons of SO2 for a Dry Scrubber (down to 0.15 lb/MMBtu) is not consistent with using a baseline of 1.7+, it is consistent with using a baseline of 0.7+.

1.7 lb/mmbtu * 15,175 mmbtu/hr = 113,000 tpy uncontrolled SO2 for both units. 0.749 lb/mmbtu * 15,175 mmbtu/hr = 49,800 tpy uncontrolled SO2 for both units 0.36 = 24,000 tpy SO2 0.15 = 10,000 tpy SO2

A reduction of 39,000 tpy SO2 is realized when you drop from 0.749 down to 0.15. There is the confusion. It appears the baseline for the BART analysis is supposed to be 0.749 lb/MMBtu and represents the 2001-03 max 24-hr SO2 emissions.

We also want to make sure we understand how much Trona you calculate needing (annual operating costs) to reduce emissions from 0.7+ down to 0.36 ($\sim50\%$ reduction).

Those are the main topics we need to discuss on the call. Let me know when we can get together to discuss. Thanks.

Brad Reid, Air Quality Division Nebraska Dept. of Environmental Quality (402) 471-4159 / 471-2909 fax

----Original Message----

From: Citta Jr., Joseph L. [mailto:jlcitta@nppd.com]

Sent: Friday, April 15, 2011 4:17 PM

To: Reid, Brad

Subject: NDEQ Ltr - NPPD's GGS Supplemental BART Assessment - DSI - RE: Mr. Reid's E-

mail of 4–8–11 Importance: High

Brad: Attached is an electronic copy of the letter to you that I placed in the mail today. The letter is the reply to your DSI related questions contained in your 4/8/11 dated e-mail. Please contact me with any questions you have.

Thanks!

Joe

Joe L. Citta Jr.

NPPD Corporate Environmental Manager (402) 563-5355 / (402) 563-5168 fax cell--(402) 910-8974 P Please consider the environment before printing this email.